

Amendments to the Specification

Please replace the paragraph beginning on page 11, line 3 and ending on page 12, line 14, with the following amended paragraph:

In the preferred embodiment of this invention, the auxiliary vibration resistant grids preferably take the form illustrated in Figures 6 and 7. From Figure 6, it can be seen that the dimples and/or springs 88,86 are coplanar and contact the fuel rods on multiple sides to provide additional rod support. In this embodiment, the springs are vertical rather than on a diagonal. As stated previously for the main support grids, the location of the vibration-resistant auxiliary grids are fixed relative to the fuel assembly at the thimble locations either by welding the grids to insert tubes or by mechanically fastening the grids to the guide thimble tubes. The outer grid strap 72 and the intermediate straps 76 and 78 on the auxiliary grids are smaller in height than the corresponding dimensions of the main support grids 46. The height of the auxiliary grids is, for example, 1.6 cm. There are no mixing vanes on the preferred embodiment of the vibration resistant auxiliary grid as shown in Figure 6, while a plurality of the main support grids 46 include mixing vanes, for example, of the type illustrated by reference character 92 in Figure 5. The outer strap of the auxiliary vibration-resistant grids and those of the main support grids include guide tabs 94, illustrated in Figures 4, 5, 6 and 7 that prevent hang-up with adjacent fuel assemblies during removal or insertion out of or into the reactor core. The inner straps 76 and 78 on the auxiliary grids provide for a larger contact area between the dimple/springs and the fuel elements than are provided by the corresponding contact areas on the main support grids 46. The contact lengths for the

vertical springs and dimples on the auxiliary grids are .52.54 cm as compared to a corresponding contact length of 2.54.5 cm on the main support grids. This latter feature plus the location(s) of the auxiliary anti-vibration support grids 68 in the fuel assembly 16 eliminate the fuel rod instability that leads to grid-to-rod fretting in high crossflow plants with pressure relief holes. In most other respects, the auxiliary support grid is constructed in the same manner noted for the main support grids. Preferably, in a 14 foot assembly, three auxiliary vibration resistant grids are positioned between adjacent mains support grids approximately within the middle third elevation along the assembly.